

**Notice of Allowability**

Application No.

09/921,298

Applicant(s)

KUTTER, PHILIPP W.

Examiner

Eric B. Kiss

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the reply filed June 18, 2007.
2. ☒ The allowed claim(s) is/are 1-6, 12-14, 24, 25 and 27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                            |                                                                                                              |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                                            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20070731</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                          |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|                                                                                                            | 9. <input type="checkbox"/> Other _____                                                                      |

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Brian G. Brannon (Reg. No. 57,219) on July 31, 2007.
3. The application has been amended as follows:

**IN THE CLAIMS**

**Please cancel claims 7-11, 15-23, and 26.**

**Please amend claims 1, 12-14, 24, 25, and 27 as follows.**

**Claim 1 (Currently Amended)** A method for the direct execution of an XML-document in a data processing system, comprising:

- defining a local behavior and process for each element of the XML-document;
- integrating executable instructions within at least one from a group of [[an]]the XML-document and a document type definition (DTD) corresponding to the XML-document; and
- storing intermediate states of an execution process of the executable instructions in a memory of the data processing system by dynamically creating and redefining attributes of elements of the XML document, where the intermediate states define intermediate states of the execution process of the executable instructions.

**Claim 12 (Currently Amended)** A method for the direct execution of XML documents comprising:

- providing an execution specification including
  - a DTD;
  - graphical flow charts; and
  - transition rules;

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providing an XML document instance including  
an XML document;  
using the DTD to validate the XML document;  
constructing an attributed structure tree from the XML document;  
decorating the attributed structure tree with the graphical flow charts to create a global  
flow chart; and  
executing the global flow chart according to the transition rules to directly execute the  
XML document.

**Claim 13 (Currently Amended)** A computer-readable medium having computer-readable  
instructions for performing a method for the direct execution of XML, the method comprising:

providing an execution specification including  
a DTD;  
graphical flow charts; and  
transition rules;  
providing an XML document instance including  
an XML document;  
using the DTD to validate the XML document;  
constructing an attributed structure tree from the XML document;  
decorating the attributed structure tree with the graphical flow charts to create a global  
flow chart; and

executing the global flow chart according to the transition rules to directly execute the XML document.

**Claim 14 (Currently Amended)** A computer-readable medium having computer-readable instructions for performing a method for the direct execution of XML-documents, the method comprising:

defining a local behavior and process for each element of the XML-document;  
integrating executable instructions within at least one from a group of a document type definition (DTD) corresponding to the XML-document and [[and]]the XML-document; and  
~~storing intermediate states by dynamically creating and redefining element attributes~~  
storing intermediate states of an execution process of the executable instructions in a memory of the data processing system by dynamically creating and redefining attributes of elements of the XML document, where the intermediate states define intermediate states of the execution process of the executable instructions.

**Claim 24 (Currently Amended)** The method of claim [[23]]2, further comprising the step of:

defining the composition of the action for at least one XML-element definition or instance by graphical flow charts representing sequential or concurrent control- and/or data-flow.

**Claim 25 (Currently Amended)** The method of claim [[23]]2, further comprising the step of:

defining the composition of the action for at least one XML-element definition or instance in textual form representing sequential or concurrent control- and/or data-flow.

**Claim 27 (Currently Amended)** The method of claim ~~[[22]]~~1, further comprising:  
modules stored in the memory of the data processing system that define a process for each element.

**--END OF AMENDMENT--**

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4. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 1 and 14, as applicant correctly notes, (*see* Remarks (06/18/2007) at pp. 15-16,) the prior art of record fails to expressly disclose or render obvious the storing of intermediate states of an execution process by dynamically creating and redefining attributes of elements of the XML document, in the context of the executable XML features in the remaining portions of claims 1 and 14.

Regarding independent claims 12 and 13, as applicant correctly notes, (*see* Remarks (06/18/2007) at pp. 19-21,) the prior art of record fails to expressly disclose or render obvious the specific execution specifications and associated processing (constructing an attributed structure tree and decorating the attributed structure tree with the graphical flow charts to create a global flow chart) which lead to execution of the XML document through execution of the created global flow chart, as recited in each of claims 12 and 13.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist: 571-272-2100.



Eric B. Kiss  
July 31, 2007